Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

CW 56: Proving Similar Triangles

**Honors Geometry**

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| **Example 1:**  Are these two triangles similar?  **Copy into your notebooks:**  To be similar, 2 things must be true.   1. All corresponding angles must be congruent. 2. Corresponding side lengths must be proportional which means that the ratio of corresponding sides must be the same.   Once you know one of these, you know that the other one is automatically true! |
| Image result for angle angle similarity**Copy into your notebooks:**  Triangles are automatically similar if they share two of the same angles. This is because if they share 2 angles, they must have the same third angle, because the sum of the interior angles of any triangle is . |

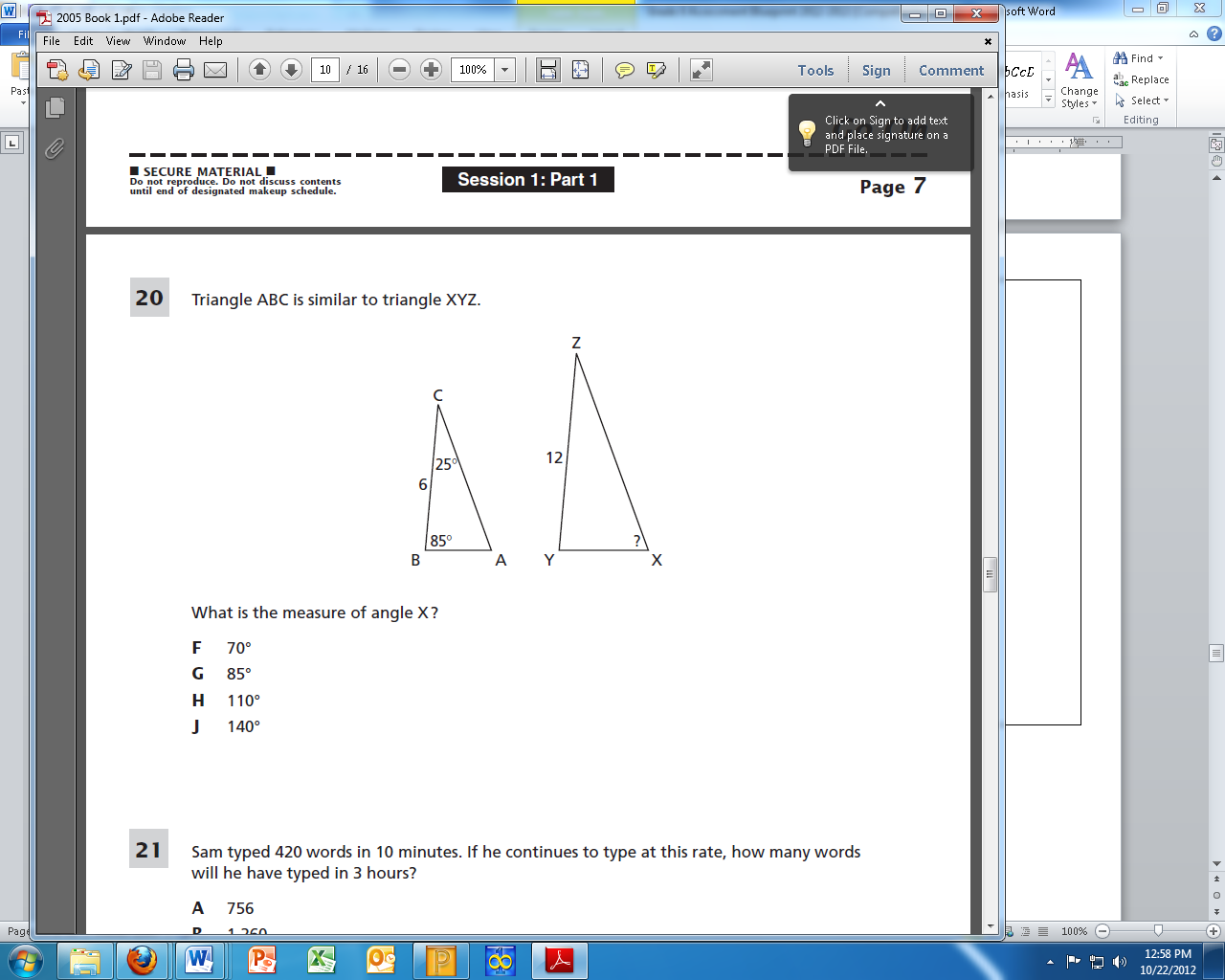
****Determine if the following sets of figures are similar. Your answer should include a claim, evidence and reasoning.

****









If it is given that triangle ABC is similar to triangle XYZ, what is the measure of X? Explain how you determined your answer.



Is triangle AKC similar to triangle KDB? Explain your reasoning below.

**Homework**. **Algebra Review**

1. and . Find , Find .
2. Find the difference of 
3. 
4. 
5. 
6. 